

Inland Wetlands and Watercourses Application
Project Narrative
Proposed Distribution Facility
35 Bacon Road - Enfield, CT

The applicant, WE 35 Bacon LLC (a subsidiary of Winstanley Enterprises), is proposing to construct a 1-story, 819,000 square foot distribution center with accompanying parking, loading docks and trailer parking at the rear of the existing Winstanley Logistics Center at 25 Bacon Road. Two tenant spaces are planned. One will consist of 318,000 SF and the other would occupy the remaining 501,000 SF.

In 2016, Winstanley purchased the property as the Hallmark Distribution Center was consolidating its operations and closing the facility. Approvals were secured to transform the existing outdated facilities into a multi-tenanted state-of-the-art warehousing and distribution facility. The improved campus was fully tenanted by 2018.

The property was subsequently reconfigured to create a 181.4-acre rear parcel (94-65) that, along with a 22-acre parcel (Parcel 97-6) abutting its eastern border and separated by an inactive rail line, is collectively referred to as 35 Bacon. The 121.07 acres comprising the 25 Bacon property contains the original Hallmark buildings. All the parcels have been zoned Industrial (I-1) from at least the time Hallmark began construction of its facility in 1981.

It should be noted that the majority of the proposed construction occurs upon the 35 Bacon Road property; however, there are minor wetland and regulated area impacts involving 25 Bacon as a result of the orientation of the proposed access road and infrastructure improvements.

Site Characteristics

Both parcels have frontage along the northern side of Bacon Road which connects North Maple Street/State Route 192 to the west and Shaker Road/State Route 220 to the east. Two driveways approximately 1,500 feet apart provide access from Bacon Road to the existing facilities at 25 Bacon Road.

Surrounding land uses consist predominantly of denser residential clusters to the east and west situated respectively around Crescent Lake and Shaker Pond. There are two industrial properties carved out of the densely wooded area on the north side of Bacon Road equidistant from the east and west access roads. An industrial park to the southeast, off Shaker Road, just past the Bacon Road intersection, runs along the west side of a rail line and appears to have been in existence before 1970. To the west, along North Maple Street, a small retail strip center and industrial properties are located south of the residences along Cottage and Wheeler streets. The northern limits of the site coincide with the Massachusetts border (East Longmeadow) and land uses immediately abutting the site are predominantly industrial associated with an organized industrial park along Deer Park Road.

The portion of the 35 Bacon Road site being considered for development has a long history of active farming. While portions of the property remain wooded, the interior portion slated for development is flat, open land with the exception of a farm pond located near the center.

Drainage Characteristics

The 25/35 Bacon Road complex is relatively flat and generally drains in a 'north to south' manner. However, there are three distinct localized watersheds within the overall site. The first watershed is made up of several sub-areas that are eventually connected to the southeast corner of the property. Sheet flow from the farm field in the northern/central portion of the property moves

southeasterly towards a constructed swale (W4) that leads to Freshwater Brook. There is also a portion of the farm field that flows to the west and into wetland complex (W5). The developed areas of the property, including the buildings, driveways, parking and loading areas discharge runoff into various treatment practices that outlet into the wetlands located in the south/central part of the property. This large wooded area contains a sizeable wetland that eventually drains to the southeast, via a culvert under the entrance driveway, and into Freshwater Brook.

The second watershed includes runoff from a small portion of the northwest portion of the site that will remain undeveloped. Runoff from this area drains in a westerly direction via sheet flow directly into Shaker Pond and its contributing wetlands. The third watershed includes runoff from undeveloped land in the west portion of the site. Runoff from this area drains in a south westerly direction.

Connecticut Wetlands and Watercourses

Site investigations were first conducted in June and July of 2016 by AECOM. During these initial surveys, AECOM delineated inland wetland and watercourses and conducted a preliminary evaluation of habitat conditions. Wetland boundaries were re-confirmed and delineated in the field on November 3 and November 4, 2021.

Seven wetland areas have been delineated within and directly adjacent to the site (W1 through W6 and W8). One additional wetland (originally identified as W7) is on the south side of Bacon Road, completely off the site. A complete description of delineated wetlands and corresponding habitat can be found in AECOM's report which is included in this application, but are summarized below, generally presented from north to south:

Wetland W1: located in the north west sector of the site, approximately 170 to 430 feet east of the proposed limits of work, and demarcates the eastern limits of Shaker Pond.

Wetland W2: approximately 2,245 SF isolated wetland pocket located in the forested upland strip east of both Wetland W1 and the limits of work.

Wetland W3: a small 0.22-acre created farm pond/watercourse located within the north-central portion of the limits of work. Based on floating aquatic vegetation, estimated maximum flooded pool depth of more than 6-8 feet deep and from observations from numerous site visits since 2016, this pool is permanently flooded and unlikely to function as vernal pool habitat. The U.S. Army Corps of Engineers recently issued a finding that this farm pond not considered to be waters of the U.S.

Wetland W4: consists of two created drainage swales located immediately north and east of the existing "high bay" building at 25 along with more recently constructed stormwater practices associated with the Applicant's redevelopment. The two swales were constructed during the original development of the Hallmark facility as part of its stormwater conveyance system. A 3 x 4-foot oval shaped concrete culvert connects the two swales and functions as a catchment and conveyance of surface waters from adjacent impervious surfaces and forested upland areas. During a storm event, surface waters captured within these swales flow southwest along the existing site access road, then turns 90 degrees to the southeast flowing through a culvert beneath the existing site access road and into a larger forested wetland system located south of the existing facility. The swales and storm-water practices now meet the criteria of state-regulated wetlands.

Wetland W5: this is another drainage swale (approximately 1600 feet long by 25 feet wide) associated with the original development and located north west of what is

considered the larger low-bay building in the vicinity of the existing water tanks at 25 Bacon. The swale functions as a catchment and conveyance of surface waters from adjacent impervious surfaces and forested upland areas. This wetland is outside of the limits of work.

Wetland W6: is an approximately 0.32-acre isolated wetland located east of the “high bay” building at 25 Bacon Road and east of what is being proposed as the dedicated access road to 35 Bacon Road. This wetland is outside of the limits of work.

Wetland W8: located outside of the limits of work and west of Wetland W4 and southeast of the existing 25 Bacon Road Facility. This wetland was actively farmed from at least 1965 through 1986.

Impact Evaluation

The proposed building and associated site improvements situated within the Project Area have been planned to avoid direct impacts to forested upland areas, avoid and minimize impacts to wetland areas on and adjacent to the Site, and utilize previously disturbed areas associated with active and formerly actively farmed areas. Furthermore, site access was designed to utilize existing gravel roads and maintained lawn areas.

Outlined below is a description of the specific areas of impacts and corresponding wetlands.

Impact Area A (Wetland 2)

A small, isolated wetland area exists in the northwest corner of the 35 Bacon site. Approximately 3,235 square feet of its regulated area would be impacted by the construction (grading) of an access road that will encircle the development for building access as well as life safety access. This impact will be of a short-term construction related disturbance, and erosion control methods will be put in place to protect the associated wetland. The disturbed area will be temporarily seeded, if needed due to construction sequencing, then permanently seeded at the end of construction. In accordance with local and state regulations as well as the Applicant's internal site maintenance protocols, the erosion protection measures will be inspected at least weekly.

Impact Area B (Wetland 3)

This 0.22-acre pond was created decades ago by a previous owner as part of farming practices that took place prior to development of the Hallmark Distribution Center. According to historic aerial photographs, the pond was excavated from within an upland area sometime between 1934 and 1952. Anecdotal information from local farmers indicates the pond was used for irrigation. After Hallmark took ownership, and continuing the practice with the Applicant, a large portion of the site continued to be farmed through a cooperative agreement with a local farmer. Over the last several years, vegetation around the pond was allowed to naturalize and expand.

The pond represents the largest impact associated with the proposed project, and as discussed in the Alternatives Analysis below, could not be avoided or minimized. Direct impact of the pond is 9,500 square feet and its associated regulated area is 68,835 square feet (given that the pond is isolated within a farm field.) The loss of the open water and associated vegetation will be mitigated by the creation of two constructed wetland/stormwater basins that would represent more than a 10:1 mitigation. These are depicted in the accompany plans as Stormwater Management Areas A and B.

Both of these areas will include open water habitat in the central portion and planted with herbaceous vegetation to establish marsh habitat within the shallower (2-3 feet) areas. The outer edge of each basin will be planted with shrubs species and the adjacent sloping areas established

with conservation seed mix as shown in the accompanying plans. An erosion control mix will be applied in the remaining areas. These seed mixes are intended to provide an initial vegetative cover in the wetland area to ensure soil stabilization and non-erosive conditions. The plant materials selected for these newly created areas will provide additional biological attenuation of stormwater constituents and more diverse habitat.

These SMAs will also include deep sumps and sediment forebays to provide storage and infiltration for stormwater runoff and meet both qualitative and quantitative objectives. The infiltration promoted by the “focused recharge” in the stormwater system will contribute to the subsurface groundwater system.

Impact Area C (Wetland 4)

The orientation of Wetland 4 and its proximity to both existing and proposed improvements will result in unavoidable impacts at three locations. The existing 25 Bacon site driveway will be extended to serve as the main entry into the 35 Bacon Road parcel. The construction of the 1800-lineal ft road will impact the regulated area associated with Wetland 4. The reconstruction of an existing drainage outlet as part of the road extension will disturb 265 square feet of wetlands. The total impact to the regulated area is 127,610 square feet. The work will involve minimal tree clearing and grading. Once constructed, the disturbed areas alongside of the driveway shall be immediately loamed and seeded. Stabilization matting and silt fences are proposed to control erosion and sedimentation during construction and minimize entry of sediment and associated contaminants into the adjacent wetland. Surface runoff from the new road will be directed to the previously constructed drainage swales which were previously sized for future driveway construction.

The northern tip of Wetland 4 would be impacted by the construction of a paved access drive to the automobile parking lot located just south of the proposed building. This impact could not be avoided due to the need to provide a second means of access/egress to serve the 285-space parking lot but also provides circulation/access for life safety vehicles. The proposed driveway impacts 985 square feet of wetland and it is estimated that it will disturb 2,970 square feet of associated regulated area. To maintain continuity of flow into the wetland, a 15-inch HDPE culvert is proposed beneath the entrance into the parking lot.

Due to topographic and drainage characteristics, Stormwater Management Area A described above will be constructed in the lowest part of the site to accommodate runoff from the eastern part of the project. 3,420 square feet and its associated regulated area is impacted by 62,215 square feet.

The total impacts to Wetland 4 as a result of proposed construction is 5670 SF of wetlands and 192,795 SF of regulated area.

Impact Area D (Wetland 5)

Due to the need to reconstruct a portion of an existing driveway immediately north of the “low-bay building” and adjacent to the existing water tanks, 10,740 square feet of regulated area associated with Wetland 5 (existing drainage swale) will be impacted by short-term temporary construction activities. The disturbed area in this location will be loamed and seeded immediately upon completion of this specific improvement.

The total impacts (in acres and square feet) to both 25 and 35 Bacon are summarized in the table below:

	25 Bacon	35 Bacon	Total	Summary
Site Area	121.07 acres	181.46 acres	302.53 acres	n/a
Wetlands	24.90 acres	13.71 acres	38.61 acres	12.76% of Total Site is Wetlands
Wetland Impacts	0.028 acres (1,205 SF) 0.11%	0.3 acres (12,965 SF) 2.1 %	0.33 acres (14,170 SF) 0.85%	0.85% of Total Wetlands Impacted
Regulated Area	41.25 acres	45.00 acres	86.25 acres	28.5% of Site is Regulated Upland
Regulated Area Impacts	0.65 acres (28,145 SF) 1.6%	5.68 acres (247,460 SF) 12.6%	6.33 acres (275,605 SF) 7.3%	7.33% of Regulated Area Impacted

With the specified erosion and sedimentation control measures in place, short-term construction-related impacts to the Upland Review Areas and associated wetlands will be minimized. The construction of the stormwater basins will provide long term water quality protection. The proposed project is not expected to have a significant impact on the wetlands as follows:

1. Construction and operations will not cause deposition or removal of material which will or may have a substantial effect on the wetland or watercourse or on wetlands or watercourses outside the area for which the activity is proposed.
2. The proposed project will not substantially change the natural channel or may inhibit the natural dynamics of watercourses.
3. The proposed project will not significantly diminish the natural capacity and function of inland wetlands or watercourses. The direct impact of the created farm pond will be mitigated by the creation of two created wetland/stormwater areas.
4. Water quality basins will reduce substantial turbidity, siltation or sedimentation in a wetland or watercourse.
5. Neither construction nor operations will cause substantial diminution of flow of a natural watercourse or groundwater levels of the wetland or watercourse.
6. Impacts related to short-term construction activities will be mitigated and long-term operations at the site will not cause pollution of a wetland or watercourse. Property maintenance specifications will prohibit the use of sodium chloride ("rock salt") and glycol-containing ice/snow treatments to protect surrounding wetlands and water resources.
7. The proposed development will not damage or destroy unique wetland or watercourse areas or such areas having demonstrable scientific or educational value.

Alternative Analysis

Over the years, the 25/35 Bacon site has been developed to avoid direct impacts to wetlands that exist on and adjacent to the site. The wetlands and more sensitive vegetative areas around Freshwater Brook and in the southern end of the property have remained in their natural state, and avoidance and protection remain as utmost priorities to the Applicant. The redevelopment of

25 Bacon a few years ago, and now the proposed development of 35 Bacon Road, minimizes impacts to higher value wetlands, especially those associated with Freshwater Brook, and instead focuses supporting infrastructure to the lower-value drainage swales that were previously constructed as part of the Hallmark facility, and now exhibit wetland soil characteristics.

The site's narrowness and depth have dictated the siting of both 25 and 35 Bacon and it its narrowness that has placed site development in close proximity to adjacent wetlands, very few if any alternatives to wetland avoidance associated with access and infrastructure are available. The design team resorted to utilizing the existing road network to the greatest extent possible and designing new roads and parking with the smallest footprint acceptable to uphold standards of practice. One of the most significant measures to reduce impervious surface was to seek tenants with smaller parking requirements. This objective was incorporated into the Applicant's pursuit of suitable tenants. The project as proposed, in fact, includes 415 vehicle spaces, with the anticipation of requesting a *reduction* from the 655 required spaces stipulated by the zoning regulations. This reduction in impervious pavement and coverage has allowed more flexibility in designing the improvements thereby reducing direct impacts as well as indirect impacts associated with larger stormwater volume and pollutant loads.

At the onset of project development, the key aspect of sizing and siting the building and the associated parking presented the greatest challenge, both physically and economically. For the last two years, as market demand grew for the site, a number of potential end-users approached the Applicant with requests for uses that were either too intensive (industrial/manufacturing) or required buildings ranging from 1.2 to 1.3 million square feet supported by parking and storage in excess of 750 vehicles. While there was financial benefit to the Applicant and economic benefits to the town, the impacts to not only wetlands but the entire site was significant.

Through a series of analyses, the design team developed prototypes for distribution/warehousing buildings after the decision was made to remain consistent with the uses and operations of 25 Bacon and avoid development that would have required air quality permits and/or intensive water consumption. The concepts reflected footprints ranging from 1.0 to 1.2 million square feet. Four examples of these concepts are included in this application.

These prototypes attracted significant interest but prospects were requesting more parking or wider access roads. As designed, these four concepts were impacting wetlands to the north and east (W1 and 2) and there was concern over protecting Shaker Pond and its associated wetlands and watershed. The request for wider access from Bacon Road would have impacted Freshwater Brook to the east. None of the concepts avoided the farm pond. Moreover, given the Applicant's strategy of investing in long-term holdings and wanting to respect the adjacent neighborhoods, these concepts would require the removal of significant stands of mature trees that currently buffer the site from adjacent neighborhoods.

Subsequent discussions with brokers and prospects tested general interest in smaller buildings in an attempt to avoid impacts to the farm pond. Demand for 500k to 800k square foot facilities was noted but the impact to the pond could not be avoided either due to the building size itself or the circulation and parking requirements.

The cost of constructing a smaller building was significantly higher given the infrastructure needed to access the site was identical to that of a larger building. The unit cost of constructing a 400k to 600K building was also considerably higher.

While alternatives to avoid impacting the pond were not feasible, the decision to construct a two-tenant building would maintain financial feasibility and would avoid impacts to Wetlands 1 and 2. Uses in the 400k-600k SF range require substantially less parking. As a result, development has been confined to the interior portion of the site to not only avoid as many wetlands as possible but also avoid the mature tree lines and adjacent natural habitat.

Stormwater Management

Generally, stormwater runoff is of concern because it may contain contaminants such as suspended solids, petroleum hydrocarbons, nutrients, heavy metals, and salts that may have adverse effects on water quality. The pollutants accumulate on predominantly impervious surfaces such as parking lots and are washed off during storm events into the receiving waterways and wetlands. The objective of the stormwater management system designed for the proposed development is to effectively remove the contaminant loading from the site runoff and provide long-term protection of the quality and use of downstream water resources.

The proposed stormwater management system will comply with CTDEEP and Town of Enfield qualitative and quantitative stormwater requirements. The proposed stormwater system will contain a number of elements that will collect, convey, recharge, treat and detain stormwater runoff from development areas and thereby protect the wetland systems found on site as well as the adjacent receiving waterbodies. The proposed systems will consist of sediment forebays (secondary treatment) and surface-type stormwater management areas (primary treatment) in addition to the existing system already in place at 25 Bacon.

In addition to the Stormwater Management Areas A and B described above, runoff will be directed into two additional stormwater management areas (SMAs C&D). These two practices will function as ***infiltration basins*** that will capture runoff primarily from the paved trailer parking area in the northern end of the site. A sediment forebay is provided at each inlet as a pretreatment measure for paved surface runoff. The outlet to SMA 'C' will be back into the drainage system on the eastern part of the site. The outlet to SMA 'D' utilizes a 'level-spreader' that, if needed, will direct flow to the northwest corner of the site, which matches the current drainage pattern in that area. Both SMAs C & D are large enough to completely store the 100-year rainfall event. These basins provide extended residence time within each practice in order to promote recharge back into the ground.

Erosion Control

Best management practices and erosion and sedimentation control measures during construction are of critical importance to the protection of the wetlands and adjacent off-site watercourses. These measures include silt fencing, stone check dams, erosion control matting and Siltsack controls at catch basin inlets in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (DEP Bulletin 34).

Temporary Erosion and Sediment Control Measures

During the construction phase of the project, specific erosion and sedimentation controls have been developed into the design of the project and details of these items are included in the project plans. The erosion control notes and construction sequence were developed to limit soil loss due to erosion and are therefore directed at minimizing the degradation of water quality on and off the site. The following temporary erosion and sedimentation control devices will be implemented throughout the site:

- Seeding: Installation of temporary or permanent seeding to establish vegetative growth to minimize erosion.
- Temporary/Permanent Mulching: Placement of materials to the soil surface to reduce the potential of erosion and aid in establishing vegetative cover.
- Dust Control: Implementing dust control activities such as watering to minimize dust from exposed surfaces.

- Temporary Stockpile Areas: Stockpiling material allows for materials to be managed and protected to reduce or eliminate wind and water erosion and prevent pollution from displaced sediment.
- Temporary Sediment Basins/Traps: Small temporary ponding areas to intercept sediment laden runoff from small disturbed areas allowing settling of sediment particles from runoff.
- Silt Fencing: Temporary sediment barrier installed across or at the toes of a slope to intercept and retain small amounts of sediment from disturbed or unprotected areas.
- Temporary Stone Check Dams: Temporary stone check dams installed across swales to intercept and retain small amounts of sediment from disturbed or unprotected areas.
- Construction Entrances/Exit: A pad of stone aggregated located at points of entrance/exit to the construction site to reduce or eliminated tracking of sediment onto public roads by construction vehicles.
- Inlet Protection (Siltsack): A sediment barrier installed in and around a storm drain inlet to reduce sediment discharge into the drainage system.

Permanent Erosion and Sediment Control Measures

Permanent erosion control measures have been included in the design of the project to limit long-term erosion conditions. Loam and seed requirements have been specified to establish conditions that minimize erodible conditions. This is complemented by the minimization of stormwater flow lengths to keep runoff quantities and velocities as low as possible. Permanent sediment control features include the selection of best management practices to control sediment on the site. The following permanent measures, when completed and in place, will provide the treatment methods that maintain long-term water quality standards in waterways:

- Vegetation: Landscaping and surface treatments that prevent or minimize soil erosion.
- Parking Lot Sweeping: Pollution and prevention practice that removes sediment, debris and trash that accumulates along streets, roads and parking lots from winter sanding practiced and everyday use.
- Sediment Forebay: Sediment forebays are designed to dissipate the energy of incoming runoff and allow for initial settling of coarse sediments.
- Stormwater Management Areas: Stormwater management areas have been designed to temporarily store runoff, allowing settling of suspended solids and facilitate the uptake of certain pollutants by the wetland vegetation.